

**IN THE CLAIMS:**

Please amend the claims as shown below.

1 – 24. (Canceled)

25. (New) A method, comprising:

generating, at a first storage environment, a first mapping of a storage object to physical storage at a second storage environment, wherein the first mapping indicates a first physical storage location at which at least a portion of the data of the storage object is stored;

obtaining, at the first storage environment, a configuration identifier associated with the storage object;

generating, from the first storage environment, a request to access the at least a portion of the data of the storage object, wherein the request includes the configuration identifier;

in response to said request to access, receiving a notification at the first storage environment of a change of location of the at least a portion of the data if the physical storage location of the at least a portion of the data has changed;

in response to said notification, generating a new mapping at the first storage environment, wherein the new mapping indicates that the at least a portion of the data is located at a second physical storage location; and

accessing, from the first storage environment, the at least a portion of the data at the second physical storage location.

26. (New) The method as recited in claim 25, further comprising:

obtaining, at the first storage environment, a new configuration identifier if the physical storage location of the at least a portion of the data has changed.

27. (New) The method as recited in claim 25, wherein the second storage environment comprises a replica of the storage object, further comprising:

generating, at the first storage environment, a mapping of the replica to physical storage.

28. (New) The method as recited in claim 25, wherein at least a portion of the data of the storage object is included within a first file system supported by a first operating system in use at the second storage environment, further comprising:

virtually mounting the first file system onto a local file system supported by a second operating system in use at the first storage environment.

29. (New) The method as recited in claim 25, wherein the first mapping includes a plurality of nodes of a data structure including a first node representing a file system layer at the second storage environment and a second node representing a volume manager layer at the second storage environment, further comprising:

obtaining, at the first storage environment, first metadata associated with the file system layer and second metadata associated with the volume manager layer.

30. (New) The method as recited in claim 25, further comprising:

generating a unique handle to identify the storage object at the first storage environment, wherein said generating the unique handle comprises resolving a naming convention conflict between the first storage environment and the second storage environment.

31. (New) The method as recited in claim 25, further comprising:

providing an application programming interface (API) library to allow access to the storage object from the first storage environment, wherein said generating the first mapping comprises invoking a first function of the API library, and wherein said obtaining the configuration identifier comprises invoking a second function of the API library.

32. (New) A system, comprising:

a processor; and

memory coupled to the processor, wherein the memory stores instructions executable by the processor to:

provide a storage mapping application programming interface (API) library including a plurality of functions;

generate, using a first function of the plurality of functions, a first mapping of a storage object to physical storage, wherein the first mapping indicates a first physical storage location at which at least a portion of the data of the storage object is stored;

obtain, using a second function of the plurality of functions, a configuration identifier associated with the storage object;

generate, using a third function of the plurality of functions, a request to access the at least a portion of the data of the storage object, wherein the request includes the configuration identifier;

in response to said request to access, receive a notification of a change of location of the at least a portion of the data if the physical storage location of the at least a portion of the data has changed; and

in response to said notification, generate, using the first function, a new mapping at the first storage environment, wherein the new mapping indicates that the at least a portion of the data is located at a second physical storage location.

33. (New) The system as recited in claim 32, wherein the instructions are further executable to:

obtain a new configuration identifier using a function of the plurality of functions if the physical storage location of the at least a portion of the data has changed.

34. (New) The system as recited in claim 32, further including a replica of the storage object, wherein the instructions are further executable to:

generate, using a function of the plurality of functions, a mapping of the replica to physical storage.

35. (New) The system as recited in claim 32, wherein at least a portion of the data of the storage object is included within a first file system supported by a first operating system, wherein the instructions are further executable to:

virtually mount the first file system onto a local file system supported by a second operating system.

36. (New) The system as recited in claim 32, wherein the first mapping includes a plurality of nodes of a data structure including a first node representing a first storage management layer at a storage environment where the data of the storage object is stored, and a second node representing a second storage management layer at the storage environment, wherein the instructions are further executable to:

obtain, using one or more functions of the plurality of functions, first metadata associated with the first storage management layer and second metadata associated with the second storage management layer.

37. (New) The system as recited in claim 32, wherein the instructions are further executable to:

generate a unique handle to identify the storage object, wherein said generating the unique handle comprises resolving a naming convention conflict between a first storage environment and a second storage environment.

38. (New) A computer readable medium comprising program instructions, wherein the instructions are computer executable to:

generate, at a first storage environment, a first mapping of a storage object to physical storage at a second storage environment, wherein the first mapping indicates a first physical storage location at which at least a portion of the data of the storage object is stored;

obtain, at the first storage environment, a configuration identifier associated with the storage object;

generate, from the first storage environment, a request to access the at least a portion of the data of the storage object, wherein the request includes the configuration identifier;

in response to said request to access, receive a notification at the first storage environment of a change of location of the at least a portion of the data if the physical storage location of the at least a portion of the data has changed;

in response to said notification, generate a new mapping at the first storage environment, wherein the new mapping indicates that the at least a portion of the data is located at a second physical storage location; and

access, from the first storage environment, the at least a portion of the data from the second physical storage location using the new mapping.

39. (New) The computer readable medium as recited in claim 38, wherein the instructions are further computer executable to:

obtain, at the first storage environment, a new configuration identifier if the physical storage location of the at least a portion of the data has changed.

40. (New) The computer readable medium as recited in claim 38, wherein the second storage environment comprises a replica of the storage object, wherein the instructions are further computer executable to:  
generate, at the first storage environment, a mapping of the replica to physical storage.

41. (New) The computer readable medium as recited in claim 38, wherein at least a portion of the data of the storage object is included within a first file system supported by a first operating system in use at the second storage environment, wherein the instructions are further computer executable to:

virtually mount the first file system onto a local file system supported by a second operating system in use at the first storage environment.

42. (New) The computer readable medium as recited in claim 38, wherein the first mapping includes a plurality of nodes of a data structure including a first node representing a file system layer at the second storage environment and a second node representing a volume manager layer at the second storage environment, wherein the instructions are further computer executable to:

obtain, at the first storage environment, first metadata associated with the file system layer and second metadata associated with the volume manager layer.

43. (New) The computer readable medium as recited in claim 38, wherein the instructions are further computer executable to:

generate a unique handle to identify the storage object at the first storage environment, wherein said generating the unique handle comprises resolving a naming convention conflict between the first storage environment and the second storage environment.

44. (New) The computer readable medium as recited in claim 38, wherein the instructions are further computer executable to:

provide an application programming interface (API) library to allow access to the storage object from the first storage environment, wherein said generating the first mapping comprises invoking a first function of the API library, and wherein said obtaining the configuration identifier comprises invoking a second function of the API library.